CHAPTER 3 THE STATE ROLE IN WATER QUALITY MANAGEMENT

3.1 OVERVIEW

3.1.1 RELATION OF STATE AND FEDERAL LAWS TO STATE WATER QUALITY MANAGEMENT

The major law dealing with water quality management at the state level is the New Mexico Water Quality Act.Because so many activities may affect water quality, other state laws besides the Water Quality Act are involved in water quality protection. Among these laws are the Utility Operators Certification Act, the Wastewater Facility Construction Loan Act, the Oil and Gas Act, the Environmental Improvement Act, the Ground Water Storage and Recovery Act, the Solid Waste Act, the Hazardous Waste Act, the Ground Water Protection Act, the Mining Act, the Voluntary Remediation Act, and several laws giving authority to local governments.New Mexico has received delegated authority from the United States Environmental Protection Agency (EPA) to implement, at the state level:

- the wastewater revolving loan program of the federal Clean Water Act (CWA);
- the underground injection control and public water supply programs of the federal Safe Drinking Water Act (SDWA);
- the hazardous waste management and the State underground storage tank programs of the federal Resource Conservation and Recovery Act (RCRA); and
- the State solid waste management program.

While New Mexico assists EPA with the administration of the National Pollutant Discharge Elimination System (NPDES) permit program of the CWA, EPA is responsible for issuance and enforcement of NPDES permits.

NMED also manages federally funded Brownfield grants for the State. Under Brownfield program, NMED provides to local governments and not-for-profit organizations free site assessment of properties that have remained vacant due to environmental concerns. The site assessment services may include installation of monitoring wells, soil sampling, waste characterization, and risk assessment.

Both the state and the federal government play significant roles in water quality management in New Mexico. This chapter describes the various programs and mechanisms for water quality management in New Mexico with emphasis on the state role.

Ground water quality management has both state and federal aspects. New Mexico's ground water protection program was well established before most of the federal legislation and regulations addressing ground water quality were adopted. State regulations controlling the disposal of oil field brines necessary to protect ground water quality have been in effect since 1969. A comprehensive ground water quality program applicable to most other types of discharges was in effect by 1977 in the form of regulations adopted by the New Mexico Water Quality Control Commission (WQCC). There are also various other state laws and regulations affecting ground water quality management.

The challenge to New Mexico has been to incorporate in its programs beneficial aspects of federal programs without disruption of state programs already in place. The state has sought and obtained primary enforcement authority over the underground injection control program established by the SDWA and the hazardous and solid waste management programs established by RCRA. The State receives limited funding from the EPA under four laws, namely, SDWA, RCRA, CWA, and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), commonly known as Superfund.

Surface water quality management in New Mexico also has state and federal aspects. The state establishes standards for intrastate and interstate waterbodies, assesses the quality of surface waters, adopts regulations, and develops programs and takes actions to protect and maintain surface water quality. The State also coordinates with EPA in implementing the CWA, the nation's primary legislation for controlling surface water quality. Under this act, Congress provides partial funding for state water quality planning and management activities, for state contractual assistance in the administration of the NPDES permit program,

and for loans for planning, design, and construction of wastewater treatment facilities by communities. EPA administers the NPDES permit program and performs administrative responsibilities pursuant to the CWA.

3.2 RESPONSIBILITIES OF THE WATER QUALITY CONTROL COMMISSION

The basic authority for water quality management in New Mexico is provided through the New Mexico Water Quality Act (Sections 74-6-1 et seq., NMSA 1978). This law establishes the WQCC and specifies its duties and powers. These include adoption of a comprehensive water quality management program, the formal approval and adoption into the New Mexico Water Quality Management Plan of Total Maximum Daily Loads, the development of a continuing planning process, the administration of loans and grants from the federal government, the adoption of water quality standards, and the adoption of regulations 'to prevent or abate water pollution in the state or in any specific geographic area or watershed of the state...or for any class of waters.' Under this act, water is defined as 'all water, including water situated wholly or partly within or bordering upon the state, whether surface or subsurface, public or private, except private waters that do not combine with other surface or subsurface water.' The WQCC is the state water pollution control agency for all purposes of the federal CWA and may take all necessary actions to secure the benefits of the Act. The composition of the WQCC is shown below in Figure 3-1.

Under the authority of the Water Quality Act, the WQCC had adopted the basic framework for water quality management in New Mexico. Major components of this framework include the continuing planning process, the State water quality management plan, ground and surface water quality standards, ground water protection regulations, underground injection control regulations, regulations for discharge to surface waters, a regulation on disposal of refuse, a spill cleanup regulation, ground water pollution abatement regulations, utility operator certification, and wastewater facility construction loan regulations. In addition, the WQCC approved a nonpoint source management program in 1989 that was updated and submitted to the EPA in January 2004.

These major components are reviewed briefly below. Where more detailed discussion of certain components is found elsewhere, cross-references are made to the appropriate sections. As the WQCC has no technical staff of its own, responsibilities for water quality management activities are delegated to constituent agencies, generally NMED or the OCD of EMNRD.

3.2.1 CONTINUING PLANNING PROCESS

The continuing planning process required by the CWA provides a framework for water pollution control activities in the state by describing program components and interrelationships. The present continuing planning process was adopted by the WQCC in 1998 (WQCC 1998).

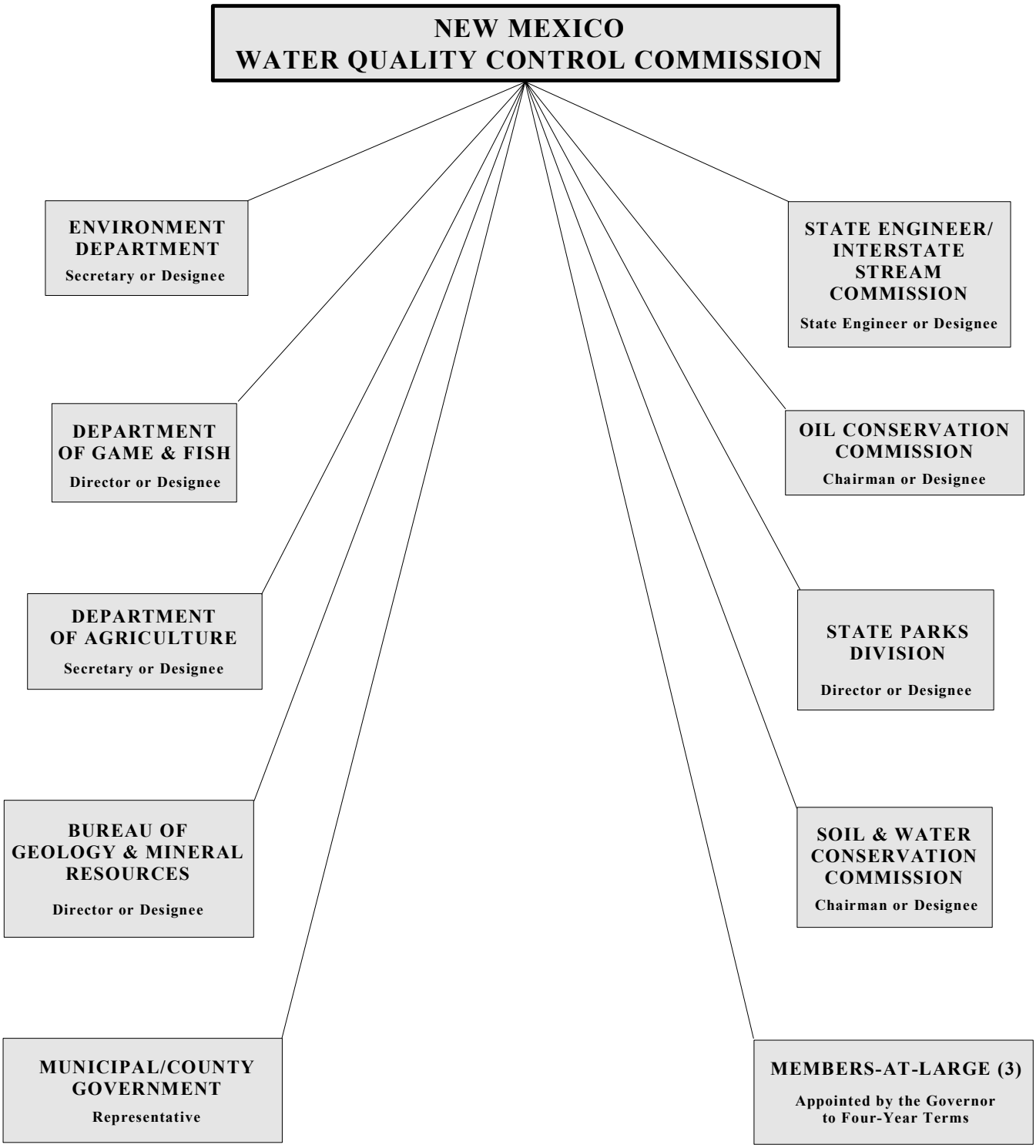
3.2.2 WATER QUALITY MANAGEMENT PLAN

The state water quality management plan helps set direction for further study of water pollution, options to be considered in development of water pollution control mechanisms such as the "Total Maximum Daily Load" process, and most importantly, strategies to be implemented by state, local, and federal agencies to maintain and, as necessary, improve water quality in New Mexico. The WQCC adopted the plan in November 1978 and May 1979 **(**WQCC 1979**)** and has delegated responsibility for development of most elements of the plan to NMED. The plan has been updated many times, with the most recent one that was adopted in 2003 representing a major restructuring of the document to coincide with specific CWA requirements. All TMDLs adopted by the WQCC become part of the water quality management plan.

3.2.3 GROUND WATER QUALITY STANDARDS

Water quality standards for 47 contaminants or classes of contaminants are included in the ground water protection regulations (WQCC 1996, 20.6.2.3103 NMAC), discussed below.

Figure 3 - 1. Composition of the New Mexico Water Quality Control Commission



3.2.4 SURFACE WATER QUALITY STANDARDS

Under the Water Quality Act, the WQCC is required to promulgate surface water quality standards (WQCC 2000). These standards include: (1) general standards applicable at all times to all surface waters of the State, unless otherwise stipulated in site-specific criteria and (2) site-specific standards for each of 69 segments set out in the standards, including their designated uses, for which the water quality is to be maintained, and numeric and narrative standards to sustain the uses; and (3) use-specific numeric water quality standards set out in 20.6.4.900 NMAC for existing, attainable and designated uses. The standards are subject to triennial review and appropriate revision pursuant to § 303(c) of the federal CWA. Amendments may be proposed at any time by NMED or others, as the Water Quality Act specifies that any person may propose amendments to the standards (§ 74-6-6. B). Proposed amendments are presented at public hearings before consideration and adoption by the WQCC. The latest triennial review was opened August 15, 2003.

3.2.5 UNDERGROUND INJECTION CONTROL REGULATIONS

Underground injection wells, other than those associated with oil and gas production, are regulated under the general ground water protection requirements (20.6.2.3000 to 20.6.2.3114 NMAC) of the WQCC regulations and under the Underground Injection Control section (20.6.2.5000 to 20.6.2.5210 NMAC) of the WQCC regulations (WQCC 1996). All types of underground injection wells except those associated with oil and gas production are subject to the Permitting and Ground Water Standards (20.6.2.3000 to 20.6.2.3114 NMAC) and must meet all applicable provisions of these regulations. The underground injection control regulations impose technical requirements on injection wells used for effluent disposal and *in-situ* mineral extraction.

3.2.6 GROUND WATER PROTECTION REGULATIONS

Both the Permitting and Ground Water Standards and the underground injection control sections of the WQCC regulations (WQCC 1996) are designed to protect all ground water with total dissolved solids concentrations of 10,000 mg/L or less for present and potential use as domestic and agricultural water supply.

3.2.7 REGULATIONS FOR DISCHARGE TO SURFACE WATERS

State regulations for this purpose, 20.6.2.2100 to 20.6.2.2102 NMAC of the WQCC regulations (WQCC 1996), are administered by NMED and OCD. As the WQCC has, to date, determined that the federal NPDES permit program should be the primary mechanism for controlling point source discharges to surface water in the State, the WQCC has incorporated a mechanism into the regulations to ensure NPDES permittees normally are not simultaneously subject to federal and State regulations. The WQCC recognizes that NMED has the responsibility to coordinate, under contract, with EPA in administering the NPDES permit program.

3.2.8 REGULATION OF DISPOSAL OF REFUSE

Section 20.6.2.2201 NMAC of the WQCC regulations (WQCC 1996) prohibits the disposal of refuse in a natural watercourse or in a location or manner where there is a reasonable probability that refuse will be moved into a natural water course. "Refuse" is broadly defined (WQCC 1996, subsection KK of 20.6.2.7 NMAC) and includes, among other things, all substances from the preparation, cooking, and consumption of food and from the handling, storage, and sale of food products, junked parts of automobiles and other machinery, paper and paper products, oil, ashes, tailings, and all unwholesome materials. NMED has used this regulation as a legal basis to stop discharge of sludge from domestic wastewater treatment plants into watercourses.

3.2.9 CLEANUP REGULATION

Section 20.6.2.1203 NMAC of the WQCC regulations is a major tool for controlling ground and surface water pollution. First, this regulation requires most leaks, spills, and other unregulated discharges that enter, or have the potential to enter surface or ground water, to be reported to NMED without delay. The only exceptions are those discharges where laws, rules, regulations, or orders require notification to OCD. WQCC regulation 20.6.2.1203.A NMAC requires that, "the owner/operator of the facility shall take such corrective actions as are necessary or appropriate to contain and remove or mitigate the damage caused by the discharge," of a water contaminant. This non-specific regulation, adopted in 1974 and modified in 1987, has been used to compel actions ranging from simple soil removal to long-term ground water remediation.

However, most longer-term cleanups are now handled under 20.6.2.4000 to 20.6.2.4115 NMAC of the WQCC Regulations, also know as the Abatement Regulations. An abatement plan includes Stage 1 (investigation) and Stage 2 (alternative selection, design and implementation) components. Abatement standards exist for the vadose zone, ground water and surface water. This section of the WQCC Regulations also includes provisions for public notice, public meetings in cases where there is significant public interest, technical infeasibility demonstrations, risk-based variances allowing cleanup to "alternative abatement standards", dispute resolution, and appeals. To avoid double regulation by the state, this section also includes exemptions for discharges where corrective action is being taken under the jurisdiction of other equivalent regulations, for example, the petroleum storage regulations.

3.2.10 UTILITY OPERATOR CERTIFICATION REGULATIONS

20.7.4 NMAC regulations help support compliance with NPDES permit limitations and State regulations in two ways: (1) by requiring utility operators to demonstrate knowledge of wastewater treatment through testing and to further their knowledge through continuing training; and, (2) by requiring that wastewater utilities be adequately staffed with certified operators. The regulations are administered and enforced by NMED.

3.2.11 WASTEWATER FACILITY CONSTRUCTION LOAN REGULATIONS

Regulations pursuant to the Wastewater Facility Construction Loan Act (Part 5, 20.7.5 NMAC) were amended by the WQCC in 1993. These regulations are used by NMED in the administration of the State revolving loan program. Part 5 defines eligibility for local authorities to borrow State and federal monies from a revolving loan fund for wastewater facility construction. The regulations also address eligible and ineligible construction items, the priority system and priority lists (project ranking), application procedures, and administration of the loan program and fund. The FY 2003 interest rate was three percent. Reduced rates ranging from 0 – 2 % are available for low-income communities. The total amount of monies loaned or obligated to loans as of July 1, 2003 was $133,000,000.

3.2.12 NONPOINT SOURCE POLLUTION MANAGEMENT PROGRAM

The WQCC has approved a nonpoint source pollution management program **(**WQCC 1979**)** mandated by the United States Congress in the 1987 Amendments to the CWA. This program was updated in January 2004.

3.2.13 CLEAN WATER ACTION PLAN

In order to help meet the goals of the Clean Water Act, states were requested, in 1998, through the Clean Water Action Plan (CWAP) to identify and prioritize watersheds with water quality problems. New Mexico used a cooperative approach to develop the Unified Watershed Assessment (UWA) that identified the following categories of watersheds (utilizing the USGS 8-digit system of watershed delineation): Category I.- Watersheds in Need of Restoration; Category II.- Watersheds Meeting Goals; Category III.- Watersheds with Pristine/Sensitive Aquatic System Conditions; and Category IV.- Watersheds with Insufficient

Data to make an Assessment. Category I watersheds fall within several of New Mexico's basins and will have additional monies through the CWAP process directed to nonpoint source pollution projects within these watersheds in the near future. These funds will focus on watersheds prioritized within the Category I watersheds.

3.2.14 OTHER RESPONSIBILITIES

Besides responsibilities for components of the basic framework reviewed above, the New Mexico Water Quality Act has assigned or the WQCC has delegated other water quality management responsibilities to NMED or OCD. These responsibilities include the following:

- State certification of licenses to construct and operate power dam facilities issued by the Federal Energy Regulatory Commission;
- investigations of existing water quality;
- lead agency for all nonpoint source pollution control activities;
- determination of the extent and causes of water pollution; and
- State certification of permits issued under CWA §§404 (Dredge-and-Fill permits) and 402 (NPDES permits).

3.3 OTHER PROGRAMS RELEVANT TO WATER POLLUTION CONTROL

Not all programs and mechanisms for water pollution control in New Mexico fall under the jurisdiction of the WQCC. This is especially true for ground water quality management. Among the major responsibilities are those of the OCD for protection of fresh water, and management of non-domestic and non-hazardous solid waste from oil and natural gas production facilities under the New Mexico Oil and Gas Act, EMNRD's Mining and Minerals Division (MMD) for reclamation of mining sites to mitigate impacts associated with hard rock mining under the New Mexico Mining Act, and those of the New Mexico Environmental Improvement Board for hazardous waste management, storage tanks, liquid waste disposal, solid waste management, and emergency response under several state laws. In addition, NMED coordinates with the federal government in the implementation of Superfund and implements the New Mexico Voluntary Remediation Program (VRP). The VRP is designed to promote voluntary cleanup of contaminated sites that are not participating in other regulatory or enforcement programs, by applicants that do not have a history of noncompliance with environmental laws. The Office of the State Engineer regulates ground water withdrawals in order to prevent saline water encroachment into fresh water.

New Mexico Water Quality Control Commission. 1979. *New Mexico Statewide Water Quality Management Plan*. Santa Fe. 107 Pages.

New Mexico Water Quality Control Commission. 1998. *State of New Mexico Continuing Planning Process*. Santa Fe.

New Mexico Water Quality Control Commission. 1996. *New Mexico Water Quality Control Commission regulations* as amended through December 1, 2001. 20.6.2 NMAC. Santa Fe. 50 pages.

New Mexico Water Quality Control Commission. 2000. *Water Quality Standards for Interstate and Intrastate Surface Waters in New Mexico*. 20.6.4 NMAC. Santa Fe. 51 Pages.

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